

METHOD FOR MANUFACTURING PDLC-BASED ELECTRO-OPTIC MODULATOR USING SPIN COATING

ABSTRACT OF THE DISCLOSURE

Electro-optic structures are constructed by spin coating water based emulsions or solvent based sensor materials, preferably a solvent-based polymer dispersed liquid crystal (PDLC), onto a substrate under conditions of controlled solvent evaporation. In a particular process, the uniformity of the PDLC coating is achieved by 1) spin coating in a semi-sealed chamber, 2) “converting” a square substrate into round substrate by using a fixture; 3) providing a controllable distance between the substrate and a spin coater top cover; and 4) providing a controllable solvent evaporation rate.

Figure 1

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